Pesticide Types

Pesticides that are related because they address the same type of pests include:

Algicides
Control algae in lakes, canals, swimming pools, water tanks, and other sites.

Antifouling agents
Kill or repel organisms that attach to underwater surfaces, such as boat bottoms.

Antimicrobials Antimicrobials
Kill microorganisms (such as bacteria and viruses).

Attractants
Attract pests (for example, to lure an insect or rodent to a trap). (However, food is not considered a pesticide when used as an attractant.)

Biopesticides
Biopesticides are certain types of pesticides derived from such natural materials as animals, plants, bacteria, and certain minerals.

Biocides
Kill microorganisms.

Disinfectants and sanitizers
Kill or inactivate disease-producing microorganisms on inanimate objects.

Fungicides
Kill fungi (including blights, mildews, molds, and rusts).

Fumigants
Produce gas or vapor intended to destroy pests in buildings or soil.

Herbicides
Kill weeds and other plants that grow where they are not wanted.

Insecticides
Kill insects and other arthropods.

Miticides (also called acaricides)
Kill mites that feed on plants and animals.

Microbial pesticides
Microorganisms that kill, inhibit, or out compete pests, including insects or other microorganisms.

Molluscicides
Kill snails and slugs.

Nematicides
Kill nematodes (microscopic, worm-like organisms that feed on plant roots).

Ovicides
Kill eggs of insects and mites.

Pheromones
Biochemicals used to disrupt the mating behavior of insects.

Repellents
Repel pests, including insects (such as mosquitoes) and birds.

Rodenticides
Control mice and other rodents.

The term pesticide also includes these substances:

Defoliants
Cause leaves or other foliage to drop from a plant, usually to facilitate harvest.

Desiccants
Promote drying of living tissues, such as unwanted plant tops.

Insect growth regulators
Disrupt the molting, maturity from pupal stage to adult, or other life processes of insects.

Plant growth regulators
Substances (excluding fertilizers or other plant nutrients) that alter the expected growth, flowering, or reproduction rate of plants.

Types of Pesticides

Pesticides are often referred to according to the type of pest they control. Another way to think about pesticides is to consider those that are chemical pesticides or are derived from a common source or production method. Other categories include biopesticides, antimicrobials, and pest control devices.

Chemical Insecticides

Some examples of chemically-related pesticides follow. Other examples are available in sources such as Recognition and Management of Pesticide Poisonings.

Organophosphate Pesticides - These pesticides affect the nervous system by disrupting the enzyme that regulates acetylcholine, a neurotransmitter. Most organophosphates are insecticides. They were developed during the early 19th century, but their effects on insects, which are similar to their effects on humans, were discovered in 1932. Some are very poisonous (they were used in World War II as nerve agents). However, they usually are not persistent in the environment.

Carbamate Pesticides affect the nervous system by disupting an enzyme that regulates acetylcholine, a neurotransmitter. The enzyme effects are usually reversible. There are several subgroups within the carbamates.

Organochlorine Insecticides were commonly used in the past, but many have been removed from the market due to their health and environmental effects and their persistence (e.g. DDT and chlordane).

Pyrethroid Pesticides were developed as a synthetic version of the naturally occurring pesticide pyrethrin, which is found in chrysanthemums. They have been modified to increase their stability in the environment. Some synthetic pyrethroids are toxic to the nervous system.